

## **ABSTRACT**

A light-emitting device is produced at a decreased cost by inspecting defects in the pixels in the step of fabrication. TFTs possessed by the pixels on the element substrate and TFTs possessed by the peripheral drive circuits are inspected by using the inspection device to detect defects in a step in a process for finishing the light-emitting device. This makes it possible to decrease the loss that results when the defective products are processed through up to the final step, and to improve the yield by repairing the defective products in a step of repairing.

A detector substrate is provided adjacent to an element substrate to inspect any defect in a semiconductor element and a wiring formed on the element substrate. An electromagnetic wave is irradiated to a gas provided between the detector substrate and the element substrate to ionize the gas. An electric current between the detection substrate and the element substrate through the ionized gas is measured by an ammeter for a video signal for displaying white. Also, an electric current between the detection substrate and the element substrate through the ionized gas is measured by an ammeter for a video signal for displaying black. A ratio of these electric currents is obtained as a ratio of white and black. An element substrate having quality lower than a reference quality is removed as defective.